

December 3, 2015

VIA ELECTRONIC MAIL

Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, DC 20581

Re: Rule Filing SR-OCC-2015-019 Rule Certification

Dear Secretary Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended ("Act"), and Commodity Futures Trading Commission Regulation ("CFTC") 40.6, enclosed is a copy of the above-referenced rule filing submitted by The Options Clearing Corporation ("OCC"). The date of implementation of the rule is at least 10 business days following receipt of the rule filing by the CFTC or the date the proposed rule is approved by the Securities and Exchange Commission (the "SEC") or otherwise becomes effective under the Securities Exchange Act of 1934 (the "Exchange Act"). This rule filing has been, or is concurrently being, submitted to the SEC under the Exchange Act.

In conformity with the requirements of Regulation 40.6(a)(7), OCC states the following:

Explanation and Analysis

This proposed rule change by OCC would implement principles-based risk control standards ("Risk Control Standards" or "Standards") for OCC's options exchanges ("Options Exchange" or "Options Exchanges," as applicable) and to charge and collect from Clearing Members a fee of two cents per each cleared options contract (per side) ("Fee") executed on an Options Exchange as discussed in more detail below, on trades executed on Options Exchanges that do not have Risk Control Standards in the following categories: (i) "Price Reasonability Checks," (ii) "Drill-Through Protections," (iii) "Activity-Based Protections," and (iv) "Kill-Switch Protections." OCC believes such a Fee would help protect itself against risk associated with clearing and settling trades that, by virtue of being executed on an Options Exchange that did not have adequate Risk Control Standards, have a greater likelihood of being erroneous, leading to an elevated risk of disruption to OCC and the financial markets it serves. OCC believes that Options Exchanges that apply Risk Control Standards to all transactions executed on such Options Exchanges are better enabled to capture and eradicate erroneous and potentially disruptive trades at the Options Exchange level, thereby reducing the likelihood that the risk

¹ See Article I, Section 1 of OCC's By-Laws.

inherent in such erroneous and potentially disruptive trades is transferred to OCC, its other Clearing Members and the financial markets served by OCC. OCC also believes implementation of the Risk Control Standards is consistent with (i) current or emerging best practice and (ii) guidance provided to OCC and other self-regulatory organizations by SEC Chair White after the latest in a series of prominent market disruptions caused an interruption of trading at one exchange.²

The following sections will describe: (i) each of the Risk Control Standards and the potential disruptive effect on OCC and, as a result, the financial markets OCC serves, if they were not in place at Options Exchanges, (ii) the process by which Options Exchanges would certify the development and use of the Risk Control Standards to OCC, and (iii) the effect on Options Exchanges if the Risk Control Standards were not in place.

Proposed Options Exchange Risk Control Standards

i. Price Reasonability Checks

Mandatory Price Reasonability Checks prevent limit orders, complex orders, and market maker quotes from being entered and displayed on an Options Exchange if the price on such order or quote is outside a defined threshold set in relation to the current market price or National Best Bid or Offer ("NBBO"). For example, an Options Exchange may set a Price Reasonability Check that would reject an order that is priced at a certain percentage above the set

See SEC Chair White Statement on Meeting with Leaders of Exchanges, September 12, 2013. ("Today's meeting was very constructive. I stressed the need for all market participants to work collaboratively – together and with the [SEC] – to strengthen critical market infrastructure and improve its resilience when technology falls short.") See also SEC Chair White, Statement on Nasdaq Trading Interruption, August 22, 2013. ("The continuous and orderly functioning of the securities markets is critically important to the health of our financial system and the confidence of investors. Today's interruption in trading, while resolved before the end of the day, was nonetheless serious and should reinforce our collective commitment to addressing technological vulnerabilities of exchanges and other market participants.")

A limit order is an order placed on an Options Exchange to buy or sell a specific amount of options contracts at a specified price or better. (*See*, e.g., International Securities Exchange Rule 715(b).)

A complex order is an order involving the execution of two or more different options series in the same underlying security occurring at or near the same time. (See, e.g., Chicago Board Options Exchange Rule 6.53C(a)(1).)

Examples herein are illustrative only, and the specifics of such examples are not necessarily required for an Options Exchange to have sufficient Risk Control Standards.

parameter or a quote entered by a market maker that is priced a certain dollar amount higher than the set threshold.⁶ Certified Options Exchanges' Price Reasonability Checks would include:

- (i) Mandatory limit order, complex order and quote Price Reasonability Checks;
- (ii) Application to all trading sessions, including market openings; and
- (iii) If the checks do not prevent the display and execution of quotes, the Options Exchange has other means by which it mitigate the risks associated with the display and execution of quotes outside the specific threshold.

Trades executed on an Options Exchange that occur at prices that were inputted erroneously and are substantially far removed from other trades executed in the same product have the potential to result in large trading losses. In 2013, a trading firm's internal algorithm used to satisfy market demand for equity options inadvertently produced orders with inaccurate price limits and sent those orders to Options Exchanges ("2013 Trading Firm Error"). Though many of the erroneous trades were later canceled, it has been estimated that the trading firm could have faced upwards of \$500 million in losses. If these potential losses were realized and if the OCC Clearing Member eventually clearing and settling those trades was unable to honor the trades, OCC and its remaining Clearing Members would have been exposed to significant losses and a potential disruption to the operations of OCC. In order to reduce the likelihood of such an occurrence, OCC is proposing to evaluate whether each Options Exchange has mandatory Price Reasonability Checks applied to all orders and quotes sent to its markets during all trading hours and applied to all transactions executed on the Options Exchanges.

ii. <u>Drill-Through Protections</u>

Drill-Through Protections are closely related to Price Reasonability Checks and would require all orders, including market orders, ⁸ limit orders, and complex orders, to be executed

By way of example, assume the market is \$1.00 bid at \$1.10. An Options Exchange Price Reasonability Check could reject orders greater than 5 cents above the offer or below the bid. Accordingly, if a broker wanted to buy an option for \$1.10, but inadvertently "fat fingers" the limit price for \$11.00 on the order, the Options Exchange would reject the order prior to execution because the limit on the order is greater than the Price Reasonability Check limit.

See In the Matter of Goldman, Sachs & Co., Order Instituting Administrative and Cease-and-Desist Proceedings, Pursuant to Sections 15(9b) and 21C of the Securities Exchange Act of 1934, Making Findings, and Imposing Remedial Sanctions and a Cease-and-Desist Order (Jun. 30, 2015) (Release No. 34-75331).

A market order is an order to buy or sell a stated number of options contracts at the best price obtainable when the order reaches the Options Exchange in which the order was sent to. (See, e.g. Chicago Board Options Exchange Rule 6.53.).

within pre-determined price increments of the NBBO. Drill-Through Protections also restrict orders from immediately trading up or down an unlimited number of price intervals and allow market liquidity to be refreshed prior to the execution of further trades. Certified Options Exchanges' Drill-Through Protections would include:

- (i) Mandatory Drill-Through Protections with reasonable quantifiable limits;
- (ii) Application to all orders; and
- (iii) Application to all trading sessions, including market openings.

Options orders that are large in size may, due to the available contra orders, be partially executed at reasonable prices with the remainder of the same order executed at prices that are far from the NBBO, and thus have the potential to result in large trading losses. For example, in 2012, a trading firm erroneously sent more than 4 million orders to equity exchanges over forty-five minutes, creating a loss of over \$450 million that nearly resulted in the trading firm's insolvency ("2012 Trading Error"). If the trading firm were unable to absorb the loss and honor the trades, the clearing agency and its surviving Clearing Members would have been exposed to significant losses and a potential disruption to their operations. While detailed facts surrounding the incident are not publicly known, Drill-Through Protections could have helped to limit the losses by preventing execution for orders that would have traded through a large number of price increments in a short period of time.

iii. Activity-Based Protections

Activity-Based Protections extend an Options Exchange's risk controls to factors beyond price and are most commonly designed to address risks associated with a high frequency of trades in a short period of time. Activity-Based Protections may address the maximum number of contracts that may be entered as one order, the maximum number of contacts that may be entered or executed by one firm over a certain period of time, and the maximum number of messages that may be entered over a certain period of time. Certified Options Exchanges' Activity-Based Protections would include:

(i) Application to all traded products available on the Options Exchange;

By way of example, assume the market is \$1.00 bid at \$1.10 and the size, or liquidity provided on the bid, or offered on the ask, is 100 contracts by 100 contracts. Assume an order is entered as a market order to buy 1000 contracts and the Drill-Through Protection is set at 5 cents and 500 milliseconds (or half a second). The Drill-Through Protection would allow the order to trade up to the price limit set, or \$1.15. At \$1.15, the order would be halted by the Options Exchange and either routed to another Options Exchange or manually executed. Also, after executing 100 contracts for \$1.10, the Drill-Through Protection would temporarily halt the order for 500 milliseconds (or half a second) to allow market makers to refresh their market and size.

See http://www.reuters.com/article/2012/10/17/us-knightcapital-results-idUSBRE89G0HI20121017.

- (ii) Mandatory use of available Activity-Based Protections by its members where the use of such protections is consistent with sound risk management practice; and
- (iii) Maximum number of contracts or orders that can be executed over a certain period of time.

Trades executed on Options Exchanges without Activity-Based Protections have a greater likelihood of erroneous trades occurring by not imposing limits based on factors other than price. Trading errors that result in a large number of orders or quotes could magnify the trading losses that result from the error and could cause the default of an OCC Clearing Member if the Clearing Member cannot meet its obligations due to such losses. For example, Activity-Based Protections could have limited the loss associated with the 2013 Trading Firm Error mentioned above.

iv. Kill-Switch Protections

Kill-Switch Protections provide Options Exchanges, and their market participants, with the ability to cancel existing orders and quotes and/or block new orders and quotes on an exchange-wide or more tailored basis (e.g., symbol specific, by member, etc.) with a single message to the Options Exchange after established trigger events are detected. A trigger event may include a situation where a market participant is disconnected from an Options Exchange due to an abnormally large inputted order or manual errors in the system by a market participant causing multiple erroneous trades to occur. Kill-Switch Protections are considered a last line of defense, applicable where, for example, a severe trading problem occurs or an Options Exchange market participant loses connectivity to the Options Exchange. Certified Options Exchanges' Kill-Switch Protections would include:

- (i) The availability, and required use in the case of Options Exchange market makers, of "heartbeat monitoring," a function that periodically sends an electronic signal between the Options Exchange and the market participant that subsequently cancels all quotes and/or orders if the market participant does not respond to the signal in a certain period of time;
- (ii) Provide participants on the Options Exchange the ability to "cancel-on-disconnect;"
- (iii) The ability to cancel all quotes and/or orders with a single message to the Options Exchange, with the availability of backup alternative messaging systems; and
- (iv) Restricted automated reentry to trading after the activation of a kill-switch.

Trades executed on Options Exchanges without Kill-Switch Protections increase the risk that trading malfunctions or other harmful events could lead to erroneous trades executed on an Options Exchange and sent to OCC for clearance and settlement. If the Clearing Member that provides clearance for these trades was not able to absorb losses associated with them, it could potentially expose OCC and its surviving Clearing Members to significant losses and a disruption of operations. For example, the potential severity of the 2012 Trading Error could have been substantially limited if a Kill-Switch Protection temporarily restricted the trading firm's ability to trade.

Certification Process¹¹

OCC has developed, in conjunction with the Options Exchanges, the following process to evaluate each Options Exchange's risk controls. Under the proposal, each Options Exchange would certify to OCC that the Options Exchange implemented the Risk Control Standards using a form provided by OCC and signed by an executive officer of the Options Exchange. ¹² OCC proposes to accept and review such certifications on an annual basis, with initial certifications being accepted by OCC beginning on the date OCC receives all regulatory approvals associated with this proposal. Options Exchanges that submit documentation before March 31, 2016 (providing regulatory approval is received prior to that date) would receive a determination from OCC regarding their Standards on June 30, 2016 ("Evaluation Completion Date"). ¹³

OCC would evaluate, based on a review of such certification and supporting materials which will include, but will not be limited to, proposed rule changes filed with the SEC, approved Options Exchange rules, information circulars, and/or written procedures, if any, an Options Exchange's Risk Control Standards by the Evaluation Completion Date, in each case consistent with the date of receipt of the certification. ¹⁴ If OCC is unable to determine that an

OCC intends to begin the collection and review of certification documents from the Options Exchanges after appropriate regulatory approval has been obtained. As such, OCC has not yet made any determinations regarding the compliance of any on Options Exchange with the proposed Standards.

The signed certification signed by an executive officer of the Options Exchange will attest to the validity, efficacy and implementation of each of the above described Standards. As part of the certification, the executive officer of the Options Exchange will certify that the Options Exchange has met the Standards as described in this proposed rule change as approved by the SEC.

If an Options Exchange intends to obtain regulatory approval prior to implementing a risk control, OCC shall consider the risk control as part of the Options Exchange if the Options Exchange makes the required regulatory filing on or prior to June 30 of the calendar year in which a determination is being made. If such regulatory filing is subsequently (i) withdrawn by the Options Exchange without a separate rule proposal to implement such risk control being filed within a reasonable amount of time thereafter or (ii) disapproved by the SEC, OCC would no longer-consider the proposal to be part of the Options Exchanges' risk controls. Beginning in 2017, annual certifications would be due on March 31 and compliance determinations would be made on or prior to June 30.

Because the proposed Standards are principle based, each Options Exchange will certify its compliance with the Standards within the proposed principles based upon a totality of the documentation submitted by the Options Exchange. Based upon the descriptions of the Options Exchange's controls in the certification and supporting materials, OCC staff will determine compliance with the Standards. OCC staff will look at factors including, but not necessarily limited to, the scope of the controls (i.e. if the controls apply to orders, quotes, etc.), the hours in which the controls will be implemented on the Options

Options Exchange has sufficient Risk Control Standards, OCC would furnish the Options Exchange with a concise written statement of the reason(s) as soon as reasonably practicable. The Options Exchange may, within 30 days of receipt of the written statement providing the reason OCC was unable to find the Options Exchange maintained sufficient Risk Control Standards, present evidence of sufficient Risk Control Standards to OCC, and OCC would conduct a second review and make a recommendation to OCC's Risk Committee whether the Options Exchange has sufficient Risk Control Standards within 30 days of receiving the evidence of such Standards from the Options Exchange. OCC's Risk Committee would, within 30 days of receipt of the recommendation, review the recommendation and the Options Exchange's supporting materials, as appropriate, to determine whether the Options Exchange has sufficient Risk Control Standards ("Risk Committee Review"). OCC would furnish the Options Exchange with a concise written statement of the Risk Committee determination and the reason for such determination as soon as reasonably practicable following the Risk Committee Review.

Beginning June 30, 2016 (providing regulatory approval is received prior to that date), OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising Clearing Members, with respect to each Options Exchange, whether: 1) OCC has determined the Options Exchange has sufficient Risk Control Standards; 2) OCC was unable to determine the Options Exchange has sufficient Risk Control Standards; or 3) a certification has not been submitted by the Options Exchange. ¹⁷

Exchange, the parameters around each control, and circumstances in which the controls will be triggered and market participants may be disconnected from an Options Exchange.

- The initial compliance decision will be determined by OCC's Risk staff.
- OCC's Risk Committee is chaired by a public Director and it does not currently have an Options Exchange representative. In the event OCC's Risk Committee has an exchange representative at some time in the future, such representative would be recused from a decision on the appeal of a determination of an Options Exchange's compliance with the Standards.
- For annual certifications commencing in 2017 and thereafter, beginning June 30 of the calendar year for which the certification is being made, OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising members, with respect to each Options Exchange, whether: (i) OCC has determined the Options Exchange has sufficient Risk Control Standards; (ii) OCC was unable to determine the Options Exchange has sufficient Risk Control Standards; or (iii) a certification has not been submitted by the Options Exchange. In addition, OCC will continue to keep a record posted of the history of each Options Exchange's compliance status, and any changes made to that status, with the Risk Control Standards on the same OCC website to which Clearing Members (but not the general public) have access in order for Clearing Members to properly keep internal records.

Effect of Non-Compliance

As stated above, on June 30 of each year, beginning with June 30, 2016, OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising Clearing Members if OCC was unable to determine that an Options Exchange has sufficient Risk Control Standards (either because an Options Exchange submitted a certification but OCC was not able to determine the Options Exchange has sufficient Risk Control Standards or because an Options Exchange did not submit a certification). Beginning on the date 60 days after posting such notice, OCC would charge and collect the Fee for trades executed on an Options Exchange for which OCC was unable to determine such Options Exchange has sufficient Risk Control Standards. In the event the Fee is charged, it would continue to be charged to and collected from Clearing Members, and the notice that OCC was unable to determine that an Options Exchange has sufficient Risk Control Standards would remain posted on OCC's website to which Clearing Members (but not the general public) have access, until the Options Exchange has furnished evidence satisfactory to OCC's Risk Committee that the Options Exchange has sufficient Risk Control Standards. OCC believes that implementing this Fee may incentivize Options Exchanges to maintain sufficient Risk Control Standards, thereby reducing further risk to OCC, as Clearing Members may determine not to transact business with Options Exchanges that are subject to the Fee. 18 However, the primary reason for the Fee is to provide funds for OCC to manage the elevated risk associated with clearing trades executed on Options Exchanges without sufficient Risk Control Standards. OCC believes the Fee is reasonable, as it represents less than half but more than a third of a premium over the base rate of five cents per contract, and as such will provide OCC with additional funds in the event of a Clearing Member default resulting from a transaction executed on an Options Exchange that does not have sufficient Risk Control Standards, but, since clearing fees represent two percent or less of the total execution cost, should not materially alter a Clearing Member's determination to execute a transaction on an Options Exchange that does not have sufficient Risk Control Standards.

OCC reviewed the derivatives clearing organization ("DCO") core principles ("Core Principles") as set forth in the Act. During this review, OCC identified the following Core Principles as potentially being impacted:

Risk Management. OCC ensures that it possesses the ability to manage the risks associated with discharging its responsibilities as a DCO by using appropriate tools and procedures. As such, OCC believes that the proposed rule change would permit OCC to effectively risk manage potential risk to OCC because the likelihood the OCC would receive erroneous and disruptive trades to clear and settle from Options Exchanges would be reduced. As part of this analysis, OCC reviewed past market disruptions including the 2013 Trading Firm Error and 2012 Trading Error described above and believes that the above described Risk Control Standards would have prevented or greatly reduced harm to OCC in those scenarios that were reviewed. OCC believes that market disruptions of this nature create a risk to OCC's

OCC notes, however, that an Options Exchange that does not maintain Risk Control Standards is not prevented from submitting transactions to OCC.

Clearing Members and ultimately OCC's financial resources. Accordingly, OCC believes that by introducing the proposed Standards, it would reduce the likelihood of certain risks to OCC, as described above.

Opposing Views

No opposing views were expressed related to the rule amendments.

Notice of Pending Rule Certification

OCC hereby certifies that notice of this rule filing has been be given to Clearing Members of OCC in compliance with Regulation 40.6(a)(2) by posting a copy of the submission on OCC's website concurrently with the filing of this submission.

Certification

OCC hereby certifies that the rule set forth at Item 1 of the enclosed filing complies with the Act and the CFTC's regulations thereunder.

Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Stephen M. Szarmack

Vice President and Associate General Counsel

Enclosure

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 19b-4

Proposed Rule Change by

THE OPTIONS CLEARING CORPORATION

Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Item 1. Text of the Proposed Rule Change

This proposed rule change by The Options Clearing Corporation ("OCC") would implement principles-based risk control standards ("Risk Control Standards" or "Standards") for OCC's options exchanges ("Options Exchange" or "Options Exchanges," as applicable) and to amend the OCC Schedule of Fees to charge and collect from Clearing Members¹ a fee of two cents per each cleared options contract (per side) ("Fee") executed on an Options Exchange for which OCC was unable to determine such Options Exchange has sufficient Risk Control Standards. Material proposed to be added to the current Schedule of Fees is marked by underlining and material proposed to be deleted is enclosed in bold brackets.

Item 2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved for filing with the Commission by the Board of Directors of OCC on December 9, 2014 and May 20, 2015.

Questions should be addressed to Stephen M. Szarmack, Vice President and Associate General Counsel, at (312) 322-4802.

Item 3. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

A. Purpose

This proposed rule change would impose a Fee as discussed in more detail below, on trades executed on Options Exchanges that do not have Risk Control Standards in the following categories: (i) "Price Reasonability Checks," (ii) "Drill-Through Protections," (iii) "Activity-Based Protections," and (iv) "Kill-Switch Protections." OCC believes such a Fee would help protect itself against risk associated with clearing and settling trades that, by virtue of being executed on an Options Exchange that did not have adequate Risk Control Standards, have a

See Article I, Section 1 of OCC's By-Laws.

greater likelihood of being erroneous, leading to an elevated risk of disruption to OCC and the financial markets it serves. OCC believes that Options Exchanges that apply Risk Control Standards to all transactions executed on such Options Exchanges are better enabled to capture and eradicate erroneous and potentially disruptive trades at the Options Exchange level, thereby reducing the likelihood that the risk inherent in such erroneous and potentially disruptive trades is transferred to OCC, its other Clearing Members and the financial markets served by OCC. OCC also believes implementation of the Risk Control Standards is consistent with (i) current or emerging best practice and (ii) guidance provided to OCC and other self-regulatory organizations by Chair White after the latest in a series of prominent market disruptions caused an interruption of trading at one exchange.²

The following sections will describe: (i) each of the Risk Control Standards and the potential disruptive effect on OCC and, as a result, the financial markets OCC serves, if they were not in place at Options Exchanges, (ii) the process by which Options Exchanges would certify the development and use of the Risk Control Standards to OCC, and (iii) the effect on Options Exchanges if the Risk Control Standards were not in place.

Proposed Options Exchange Risk Control Standards

i. Price Reasonability Checks

See SEC Chair White Statement on Meeting with Leaders of Exchanges, September 12, 2013. ("Today's meeting was very constructive. I stressed the need for all market participants to work collaboratively – together and with the Commission – to strengthen critical market infrastructure and improve its resilience when technology falls short.")

See also Chair White, Statement on Nasdaq Trading Interruption, August 22, 2013. ("The continuous and orderly functioning of the securities markets is critically important to the health of our financial system and the confidence of investors. Today's interruption in trading, while resolved before the end of the day, was nonetheless serious and should reinforce our collective commitment to addressing technological vulnerabilities of exchanges and other market participants.")

Mandatory Price Reasonability Checks prevent limit orders,³ complex orders,⁴ and market maker quotes from being entered and displayed on an Options Exchange if the price on such order or quote is outside a defined threshold set in relation to the current market price or National Best Bid or Offer ("NBBO"). For example,⁵ an Options Exchange may set a Price Reasonability Check that would reject an order that is priced at a certain percentage above the set parameter or a quote entered by a market maker that is priced a certain dollar amount higher than the set threshold.⁶ Certified Options Exchanges' Price Reasonability Checks would include:

- (i) Mandatory limit order, complex order and quote Price Reasonability

 Checks;
- (ii) Application to all trading sessions, including market openings; and
- (iii) If the checks do not prevent the display and execution of quotes, the Options Exchange has other means by which it mitigate the risks associated with the display and execution of quotes outside the specific threshold.

A limit order is an order placed on an Options Exchange to buy or sell a specific amount of options contracts at a specified price or better. (See, e.g., International Securities Exchange Rule 715(b).)

A complex order is an order involving the execution of two or more different options series in the same underlying security occurring at or near the same time. (See, e.g., Chicago Board Options Exchange Rule 6.53C(a)(1).)

Examples herein are illustrative only, and the specifics of such examples are not necessarily required for an Options Exchange to have sufficient Risk Control Standards.

By way of example, assume the market is \$1.00 bid at \$1.10. An Options Exchange Price Reasonability Check could reject orders greater than 5 cents above the offer or below the bid. Accordingly, if a broker wanted to buy an option for \$1.10, but inadvertently "fat fingers" the limit price for \$11.00 on the order, the Options Exchange would reject the order prior to execution because the limit on the order is greater than the Price Reasonability Check limit.

Trades executed on an Options Exchange that occur at prices that were inputted erroneously and are substantially far removed from other trades executed in the same product have the potential to result in large trading losses. In 2013, a trading firm's internal algorithm used to satisfy market demand for equity options inadvertently produced orders with inaccurate price limits and sent those orders to Options Exchanges ("2013 Trading Firm Error"). Though many of the erroneous trades were later canceled, it has been estimated that the trading firm could have faced upwards of \$500 million in losses. If these potential losses were realized and if the OCC Clearing Member eventually clearing and settling those trades was unable to honor the trades, OCC and its remaining Clearing Members would have been exposed to significant losses and a potential disruption to the operations of OCC. In order to reduce the likelihood of such an occurrence, OCC is proposing to evaluate whether each Options Exchange has mandatory Price Reasonability Checks applied to all orders and quotes sent to its markets during all trading hours and applied to all transactions executed on the Options Exchanges.

ii. Drill-Through Protections

Drill-Through Protections are closely related to Price Reasonability Checks and would require all orders, including market orders, ⁸ limit orders, and complex orders, to be executed within pre-determined price increments of the NBBO. Drill-Through Protections also restrict orders from immediately trading up or down an unlimited number of price intervals and allow

See In the Matter of Goldman, Sachs & Co., Order Instituting Administrative and Cease-and-Desist Proceedings, Pursuant to Sections 15(9b) and 21C of the Securities Exchange Act of 1934, Making Findings, and Imposing Remedial Sanctions and a Cease-and-Desist Order (Jun. 30, 2015) (Release No. 34-75331).

A market order is an order to buy or sell a stated number of options contracts at the best price obtainable when the order reaches the Options Exchange in which the order was sent to. (See, e.g. Chicago Board Options Exchange Rule 6.53.).

market liquidity to be refreshed prior to the execution of further trades.⁹ Certified Options Exchanges' Drill-Through Protections would include:

- (i) Mandatory Drill-Through Protections with reasonable quantifiable limits;
- (ii) Application to all orders; and
- (iii) Application to all trading sessions, including market openings.

Options orders that are large in size may, due to the available contra orders, be partially executed at reasonable prices with the remainder of the same order executed at prices that are far from the NBBO, and thus have the potential to result in large trading losses. For example, in 2012, a trading firm erroneously sent more than 4 million orders to equity exchanges over forty-five minutes, creating a loss of over \$450 million that nearly resulted in the trading firm's insolvency ("2012 Trading Error"). If the trading firm were unable to absorb the loss and honor the trades, the clearing agency and its surviving Clearing Members would have been exposed to significant losses and a potential disruption to their operations. While detailed facts surrounding the incident are not publicly known, Drill-Through Protections could have helped to limit the losses by preventing execution for orders that would have traded through a large number of price increments in a short period of time.

By way of example, assume the market is \$1.00 bid at \$1.10 and the size, or liquidity provided on the bid, or offered on the ask, is 100 contracts by 100 contracts. Assume an order is entered as a market order to buy 1000 contracts and the Drill-Through Protection is set at 5 cents and 500 milliseconds (or half a second). The Drill-Through Protection would allow the order to trade up to the price limit set, or \$1.15. At \$1.15, the order would be halted by the Options Exchange and either routed to another Options Exchange or manually executed. Also, after executing 100 contracts for \$1.10, the Drill-Through Protection would temporarily halt the order for 500 milliseconds (or half a second) to allow market makers to refresh their market and size.

See http://www.reuters.com/article/2012/10/17/us-knightcapital-results-idUSBRE89G0HI20121017.

iii. Activity-Based Protections

Activity-Based Protections extend an Options Exchange's risk controls to factors beyond price and are most commonly designed to address risks associated with a high frequency of trades in a short period of time. Activity-Based Protections may address the maximum number of contracts that may be entered as one order, the maximum number of contacts that may be entered or executed by one firm over a certain period of time, and the maximum number of messages that may be entered over a certain period of time. Certified Options Exchanges' Activity-Based Protections would include:

- (i) Application to all traded products available on the Options Exchange;
- (ii) Mandatory use of available Activity-Based Protections by its members where the use of such protections is consistent with sound risk management practice; and
- (iii) Maximum number of contracts or orders that can be executed over a certain period of time.

Trades executed on Options Exchanges without Activity-Based Protections have a greater likelihood of erroneous trades occurring by not imposing limits based on factors other than price. Trading errors that result in a large number of orders or quotes could magnify the trading losses that result from the error and could cause the default of an OCC Clearing Member if the Clearing Member cannot meet its obligations due to such losses. For example, Activity-Based Protections could have limited the loss associated with the 2013 Trading Firm Error mentioned above.

iv. Kill-Switch Protections

Kill-Switch Protections provide Options Exchanges, and their market participants, with the ability to cancel existing orders and quotes and/or block new orders and quotes on an exchange-wide or more tailored basis (e.g., symbol specific, by member, etc.) with a single message to the Options Exchange after established trigger events are detected. A trigger event may include a situation where a market participant is disconnected from an Options Exchange due to an abnormally large inputted order or manual errors in the system by a market participant causing multiple erroneous trades to occur. Kill-Switch Protections are considered a last line of defense, applicable where, for example, a severe trading problem occurs or an Options Exchange market participant loses connectivity to the Options Exchange. Certified Options Exchanges' Kill-Switch Protections would include:

- (i) The availability, and required use in the case of Options Exchange market makers, of "heartbeat monitoring," a function that periodically sends an electronic signal between the Options Exchange and the market participant that subsequently cancels all quotes and/or orders if the market participant does not respond to the signal in a certain period of time;
- (ii) Provide participants on the Options Exchange the ability to "cancel-on-disconnect;"
- (iii) The ability to cancel all quotes and/or orders with a single message to the Options Exchange, with the availability of backup alternative messaging systems; and
- (iv) Restricted automated reentry to trading after the activation of a kill-switch.

Trades executed on Options Exchanges without Kill-Switch Protections increase the risk that trading malfunctions or other harmful events could lead to erroneous trades executed on an Options Exchange and sent to OCC for clearance and settlement. If the Clearing Member that provides clearance for these trades was not able to absorb losses associated with them, it could

potentially expose OCC and its surviving Clearing Members to significant losses and a disruption of operations. For example, the potential severity of the 2012 Trading Error could have been substantially limited if a Kill-Switch Protection temporarily restricted the trading firm's ability to trade.

Certification Process¹¹

OCC has developed, in conjunction with the Options Exchanges, the following process to evaluate each Options Exchange's risk controls. Under the proposal, each Options Exchange would certify to OCC that the Options Exchange implemented the Risk Control Standards using a form provided by OCC and signed by an executive officer of the Options Exchange. ¹² OCC proposes to accept and review such certifications on an annual basis, with initial certifications being accepted by OCC beginning on the date OCC receives all regulatory approvals associated with this proposal. Options Exchanges that submit documentation before March 31, 2016 (providing regulatory approval is received prior to that date) would receive a determination from OCC regarding their Standards on June 30, 2016 ("Evaluation Completion Date"). ¹³

OCC intends to begin the collection and review of certification documents from the Options Exchanges after appropriate regulatory approval has been obtained. As such, OCC has not yet made any determinations regarding the compliance of any on Options Exchange with the proposed Standards.

The signed certification signed by an executive officer of the Options Exchange will attest to the validity, efficacy and implementation of each of the above described Standards. As part of the certification, the executive officer of the Options Exchange will certify that the Options Exchange has met the Standards as described in this proposed rule change as approved by the Commission.

If an Options Exchange intends to obtain regulatory approval prior to implementing a risk control, OCC shall consider the risk control as part of the Options Exchange if the Options Exchange makes the required regulatory filing on or prior to June 30 of the calendar year in which a determination is being made. If such regulatory filing is subsequently (i) withdrawn by the Options Exchange without a separate rule proposal to implement such risk control being filed within a reasonable amount of time thereafter or

OCC would evaluate, based on a review of such certification and supporting materials which will include, but will not be limited to, proposed rule changes filed with the Commission, approved Options Exchange rules, information circulars, and/or written procedures, if any, an Options Exchange's Risk Control Standards by the Evaluation Completion Date, in each case consistent with the date of receipt of the certification.¹⁴ If OCC is unable to determine that an Options Exchange has sufficient Risk Control Standards, OCC would furnish the Options Exchange with a concise written statement of the reason(s) as soon as reasonably practicable.¹⁵ The Options Exchange may, within 30 days of receipt of the written statement providing the reason OCC was unable to find the Options Exchange maintained sufficient Risk Control Standards, present evidence of sufficient Risk Control Standards to OCC, and OCC would conduct a second review and make a recommendation to OCC's Risk Committee¹⁶ whether the

⁽ii) disapproved by the SEC, OCC would no longer-consider the proposal to be part of the Options Exchanges' risk controls. Beginning in 2017, annual certifications would be due on March 31 and compliance determinations would be made on or prior to June 30.

Because the proposed Standards are principle based, each Options Exchange will certify its compliance with the Standards within the proposed principles based upon a totality of the documentation submitted by the Options Exchange. Based upon the descriptions of the Options Exchange's controls in the certification and supporting materials, OCC staff will determine compliance with the Standards. OCC staff will look at factors including, but not necessarily limited to, the scope of the controls (i.e. if the controls apply to orders, quotes, etc.), the hours in which the controls will be implemented on the Options Exchange, the parameters around each control, and circumstances in which the controls will be triggered and market participants may be disconnected from an Options Exchange.

The initial compliance decision will be determined by OCC's Risk staff.

OCC's Risk Committee is chaired by a public Director and it does not currently have an Options Exchange representative. In the event OCC's Risk Committee has an exchange representative at some time in the future, such representative would be recused from a decision on the appeal of a determination of an Options Exchange's compliance with the Standards.

Options Exchange has sufficient Risk Control Standards within 30 days of receiving the evidence of such Standards from the Options Exchange. OCC's Risk Committee would, within 30 days of receipt of the recommendation, review the recommendation and the Options Exchange's supporting materials, as appropriate, to determine whether the Options Exchange has sufficient Risk Control Standards ("Risk Committee Review"). OCC would furnish the Options Exchange with a concise written statement of the Risk Committee determination and the reason for such determination as soon as reasonably practicable following the Risk Committee Review.

Beginning June 30, 2016 (providing regulatory approval is received prior to that date), OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising Clearing Members, with respect to each Options Exchange, whether: 1) OCC has determined the Options Exchange has sufficient Risk Control Standards; 2) OCC was unable to determine the Options Exchange has sufficient Risk Control Standards; or 3) a certification has not been submitted by the Options Exchange.¹⁷

Effect of Non-Compliance

As stated above, on June 30 of each year, beginning with June 30, 2016, OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising Clearing Members if OCC was unable to determine that an Options Exchange has

For annual certifications commencing in 2017 and thereafter, beginning June 30 of the calendar year for which the certification is being made, OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising members, with respect to each Options Exchange, whether: (i) OCC has determined the Options Exchange has sufficient Risk Control Standards; (ii) OCC was unable to determine the Options Exchange has sufficient Risk Control Standards; or (iii) a certification has not been submitted by the Options Exchange. In addition, OCC will continue to keep a record posted of the history of each Options Exchange's compliance status, and any changes made to that status, with the Risk Control Standards on the same OCC website to which Clearing Members (but not the general public) have access in order for Clearing Members to properly keep internal records.

sufficient Risk Control Standards (either because an Options Exchange submitted a certification but OCC was not able to determine the Options Exchange has sufficient Risk Control Standards or because an Options Exchange did not submit a certification). Beginning on the date 60 days after posting such notice, OCC would charge and collect the Fee for trades executed on an Options Exchange for which OCC was unable to determine such Options Exchange has sufficient Risk Control Standards. In the event the Fee is charged, it would continue to be charged to and collected from Clearing Members, and the notice that OCC was unable to determine that an Options Exchange has sufficient Risk Control Standards would remain posted on OCC's website to which Clearing Members (but not the general public) have access, until the Options Exchange has furnished evidence satisfactory to OCC's Risk Committee that the Options Exchange has sufficient Risk Control Standards. OCC believes that implementing this Fee may incentivize Options Exchanges to maintain sufficient Risk Control Standards, thereby reducing further risk to OCC, as Clearing Members may determine not to transact business with Options Exchanges that are subject to the Fee. 19 However, the primary reason for the Fee is to provide funds for OCC to manage the elevated risk associated with clearing trades executed on Options Exchanges without sufficient Risk Control Standards. OCC believes the Fee is reasonable, as it represents less than half but more than a third of a premium over the base rate of five cents per contract, and as such will provide OCC with additional funds in the event of a Clearing Member default resulting from a transaction executed on an Options Exchange that

Attached as Exhibit 5 is an updated Schedule of Fees reflecting the Fee. As proposed, the Fee will be applied to all trades executed on a non-compliant Options Exchange. In other words, no more, or less, than a two cents Fee will be applied to trades executed on an Options Exchanges deemed to not be compliant.

OCC notes, however, that an Options Exchange that does not maintain Risk Control Standards is not prevented from submitting transactions to OCC.

does not have sufficient Risk Control Standards, but, since clearing fees represent two percent or less of the total execution cost, should not materially alter a Clearing Member's determination to execute a transaction on an Options Exchange that does not have sufficient Risk Control Standards.

Anticipated Risk Mitigation

OCC believes that applying the Risk Control Standards to the Options Exchanges that choose to submit a certification would mitigate potential risks to OCC and its Clearing Members. As part of this analysis, OCC reviewed past market disruptions including the 2013 Trading Firm Error and 2012 Trading Error described above and believes that the above described Risk Control Standards would have prevented or greatly reduced harm to OCC in those scenarios that were reviewed. OCC believes that market disruptions of this nature create a risk to OCC's Clearing Members and ultimately OCC's financial resources. As such, OCC believes that by introducing the proposed Standards, it can reduce the likelihood of financial harm to OCC and the market as a whole.

B. Statutory Basis

OCC believes that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Securities Exchange Act of 1934, as amended (the "Act"),²⁰ as it would help ensure the safeguarding of securities and funds which are in the custody and control of OCC. Evaluating whether the Options Exchanges demonstrate sufficient risk controls and imposing a two cent fee on trades executed on an Options Exchange that does not would reduce the likelihood an erroneous trade: (i) is guaranteed by OCC, (ii) causes an OCC Clearing Member to default, and (iii) stresses the financial resources of OCC available for use in the event of a Clearing Member

²⁰ 15 U.S.C. 78q-1(b)(3)(F).

default, which financial resources include mutualized resources deposited by non-defaulting Clearing Members with OCC as Clearing Fund.

For similar reasons, OCC believes the proposed increase to fees for transactions executed on an Options Exchange for which OCC was unable to determine such Options Exchange has sufficient Risk Control Standards is an equitable allocation of reasonable fees among its participants, as required by Section 17A(b)(3)(D) of the Act.²¹ The proposed additional Fee would be charged to Clearing Members that execute trades on Options Exchanges that were not deemed compliant with the Standards. These transactions executed on these Options Exchanges generate risk for OCC by increasing the likelihood that a guaranteed erroneous trade stresses OCC's financial resources available in the event of a Clearing Member default and that OCC would use mutualized resources deposited by non-defaulting Clearing Members to cover at least part of the loss. The two cent charge will better enable OCC to allocate fees to transactions that are driving that risk.

Finally, OCC believes the proposed rule change is consistent with Rule 17Ad-22(b)(4)²² because it would help ensure that OCC guards against risk associated with clearing erroneous trades entered on an Options Exchange by requiring Risk Control Standards that are designed to prevent such erroneous trades from being submitted to OCC for clearing. As noted above, erroneous trades lead to an elevated risk of disruption to OCC and the financial markets it serves. OCC also notes that the proposed rule change is not inconsistent with any existing OCC By-Laws or Rules, including those proposed to be amended.

²¹ 15 U.S.C. 78q-1(b)(3)(D).

²² 12 CFR 240.17Ad-22(b)(4)

Item 4. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

The proposed rule change may impose a burden on competition by virtue of the potential imposition of the two cent fee on Options Exchanges that do not demonstrate sufficient Risk Control Standards.²³ OCC believes this potential burden on competition is necessary in furtherance of the Act, as it is vitally important that a systemically important financial market utility like OCC has adequate means by which to protect itself against the heightened risk it carries by providing clearing services for Options Exchanges that do not demonstrate sufficient Risk Control Standards in order to protect the financial markets that OCC serves. The proposed rule change protects investors by reducing the risk to OCC's financial resources, which furthers the intent of the Act.

Item 5. <u>Self-Regulatory Organization's Statement on Comments on the Proposed</u> Rule Change Received from Members, Participants, or Others

Written comments were not and are not intended to be solicited with respect to the proposed rule change, and none have been received.

Item 6. Extension of Time Period for Commission Action

OCC does not consent to an extension of the time period specified in Section 19(b)(2) of the Act.²⁴

Item 7. <u>Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2) or Section 19(b)(7)(D)</u>

Not applicable.

Item 8. Proposed Rule Change Based on Rules of Another Self-Regulatory

²³ 15 U.S.C. 78q-1(b)(3)(I).

²⁴ 15 U.S.C. 78s(b)(2).

Organization or of the Commission

Not applicable.

Item 9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

Item 10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

Item 11. Exhibits

Exhibit 1A. Completed Notice of Proposed Rule Change for publication in the <u>Federal Register</u>.

Exhibit 3. Risk Control Standards Certification Form.

Exhibit 5. OCC Schedule of Fees, September 2016.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, The Options

Clearing Corporation has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

THE OPTIONS CLEARING CORPORATION

By:

Stephen M. Szarmack

Vice President and Associate General

Counsel

EXHIBIT 1A

SECURITIES AND EXCHAI	NGE COMMISSION
(Release No. 34-[]; File No. SR-OCC-2015-019)

December 3, 2015

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing of a Proposed Rule Change Concerning the Implementation of Principles-Based Risk Control Standards for Options Exchanges

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder² notice is hereby given that on December 3, 2015, The Options Clearing Corporation ("OCC") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II and III below, which Items have been prepared primarily by OCC. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. <u>Clearing Agency's Statement of the Terms of Substance of the Proposed Rule Change</u>

This proposed rule change by OCC would implement principles-based risk control standards ("Risk Control Standards" or "Standards") for OCC's options exchanges ("Options Exchange" or "Options Exchanges," as applicable) and to amend the OCC Schedule of Fees to charge and collect from Clearing Members³ a fee of two cents per each cleared options contract (per side) ("Fee") executed on an Options Exchange for which OCC was unable to determine such Options Exchange has sufficient Risk Control Standards.

II. <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Article I, Section 1 of OCC's By-Laws.

In its filing with the Commission, OCC included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. OCC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.

(A) <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

1. Purpose

This proposed rule change would impose a Fee as discussed in more detail below, on trades executed on Options Exchanges that do not have Risk Control Standards in the following categories: (i) "Price Reasonability Checks," (ii) "Drill-Through Protections," (iii) "Activity-Based Protections," and (iv) "Kill-Switch Protections." OCC believes such a Fee would help protect itself against risk associated with clearing and settling trades that, by virtue of being executed on an Options Exchange that did not have adequate Risk Control Standards, have a greater likelihood of being erroneous, leading to an elevated risk of disruption to OCC and the financial markets it serves. OCC believes that Options Exchanges that apply Risk Control Standards to all transactions executed on such Options Exchanges are better enabled to capture and eradicate erroneous and potentially disruptive trades at the Options Exchange level, thereby reducing the likelihood that the risk inherent in such erroneous and potentially disruptive trades is transferred to OCC, its other Clearing Members and the financial markets served by OCC. OCC also believes implementation of the Risk Control Standards is consistent with (i) current or emerging best practice and (ii) guidance provided to OCC and other self-regulatory organizations

by Chair White after the latest in a series of prominent market disruptions caused an interruption of trading at one exchange.⁴

The following sections will describe: (i) each of the Risk Control Standards and the potential disruptive effect on OCC and, as a result, the financial markets OCC serves, if they were not in place at Options Exchanges, (ii) the process by which Options Exchanges would certify the development and use of the Risk Control Standards to OCC, and (iii) the effect on Options Exchanges if the Risk Control Standards were not in place.

Proposed Options Exchange Risk Control Standards

i. Price Reasonability Checks

Mandatory Price Reasonability Checks prevent limit orders,⁵ complex orders,⁶ and market maker quotes from being entered and displayed on an Options Exchange if the price on such order or quote is outside a defined threshold set in relation to the current market price or

See SEC Chair White Statement on Meeting with Leaders of Exchanges, September 12, 2013. ("Today's meeting was very constructive. I stressed the need for all market participants to work collaboratively – together and with the Commission – to strengthen critical market infrastructure and improve its resilience when technology falls short.") See also Chair White, Statement on Nasdaq Trading Interruption, August 22, 2013. ("The continuous and orderly functioning of the securities markets is critically important to the health of our financial system and the confidence of investors. Today's interruption in trading, while resolved before the end of the day, was nonetheless serious and should reinforce our collective commitment to addressing technological vulnerabilities of exchanges and other market participants.")

A limit order is an order placed on an Options Exchange to buy or sell a specific amount of options contracts at a specified price or better. (See, e.g., International Securities Exchange Rule 715(b).)

A complex order is an order involving the execution of two or more different options series in the same underlying security occurring at or near the same time. (See, e.g., Chicago Board Options Exchange Rule 6.53C(a)(1).)

National Best Bid or Offer ("NBBO"). For example,⁷ an Options Exchange may set a Price Reasonability Check that would reject an order that is priced at a certain percentage above the set parameter or a quote entered by a market maker that is priced a certain dollar amount higher than the set threshold.⁸ Certified Options Exchanges' Price Reasonability Checks would include:

- (i) Mandatory limit order, complex order and quote Price Reasonability

 Checks;
- (ii) Application to all trading sessions, including market openings; and
- (iii) If the checks do not prevent the display and execution of quotes, the Options Exchange has other means by which it mitigate the risks associated with the display and execution of quotes outside the specific threshold.

Trades executed on an Options Exchange that occur at prices that were inputted erroneously and are substantially far removed from other trades executed in the same product have the potential to result in large trading losses. In 2013, a trading firm's internal algorithm used to satisfy market demand for equity options inadvertently produced orders with inaccurate price limits and sent those orders to Options Exchanges ("2013 Trading Firm Error"). Though many of the erroneous trades were later canceled, it has been estimated that the trading firm

Examples herein are illustrative only, and the specifics of such examples are not necessarily required for an Options Exchange to have sufficient Risk Control Standards.

By way of example, assume the market is \$1.00 bid at \$1.10. An Options Exchange Price Reasonability Check could reject orders greater than 5 cents above the offer or below the bid. Accordingly, if a broker wanted to buy an option for \$1.10, but inadvertently "fat fingers" the limit price for \$11.00 on the order, the Options Exchange would reject the order prior to execution because the limit on the order is greater than the Price Reasonability Check limit.

could have faced upwards of \$500 million in losses.⁹ If these potential losses were realized and if the OCC Clearing Member eventually clearing and settling those trades was unable to honor the trades, OCC and its remaining Clearing Members would have been exposed to significant losses and a potential disruption to the operations of OCC. In order to reduce the likelihood of such an occurrence, OCC is proposing to evaluate whether each Options Exchange has mandatory Price Reasonability Checks applied to all orders and quotes sent to its markets during all trading hours and applied to all transactions executed on the Options Exchanges.

ii. <u>Drill-Through Protections</u>

Drill-Through Protections are closely related to Price Reasonability Checks and would require all orders, including market orders, ¹⁰ limit orders, and complex orders, to be executed within pre-determined price increments of the NBBO. Drill-Through Protections also restrict orders from immediately trading up or down an unlimited number of price intervals and allow market liquidity to be refreshed prior to the execution of further trades.¹¹ Certified Options

See In the Matter of Goldman, Sachs & Co., Order Instituting Administrative and Cease-and-Desist Proceedings, Pursuant to Sections 15(9b) and 21C of the Securities Exchange Act of 1934, Making Findings, and Imposing Remedial Sanctions and a Cease-and-Desist Order (Jun. 30, 2015) (Release No. 34-75331).

A market order is an order to buy or sell a stated number of options contracts at the best price obtainable when the order reaches the Options Exchange in which the order was sent to. (See, e.g. Chicago Board Options Exchange Rule 6.53.).

By way of example, assume the market is \$1.00 bid at \$1.10 and the size, or liquidity provided on the bid, or offered on the ask, is 100 contracts by 100 contracts. Assume an order is entered as a market order to buy 1000 contracts and the Drill-Through Protection is set at 5 cents and 500 milliseconds (or half a second). The Drill-Through Protection would allow the order to trade up to the price limit set, or \$1.15. At \$1.15, the order would be halted by the Options Exchange and either routed to another Options Exchange or manually executed. Also, after executing 100 contracts for \$1.10, the Drill-Through Protection would temporarily halt the order for 500 milliseconds (or half a second) to allow market makers to refresh their market and size.

Exchanges' Drill-Through Protections would include:

- (i) Mandatory Drill-Through Protections with reasonable quantifiable limits;
- (ii) Application to all orders; and
- (iii) Application to all trading sessions, including market openings.

Options orders that are large in size may, due to the available contra orders, be partially executed at reasonable prices with the remainder of the same order executed at prices that are far from the NBBO, and thus have the potential to result in large trading losses. For example, in 2012, a trading firm erroneously sent more than 4 million orders to equity exchanges over forty-five minutes, creating a loss of over \$450 million that nearly resulted in the trading firm's insolvency ("2012 Trading Error").¹² If the trading firm were unable to absorb the loss and honor the trades, the clearing agency and its surviving Clearing Members would have been exposed to significant losses and a potential disruption to their operations. While detailed facts surrounding the incident are not publicly known, Drill-Through Protections could have helped to limit the losses by preventing execution for orders that would have traded through a large number of price increments in a short period of time.

iii. Activity-Based Protections

Activity-Based Protections extend an Options Exchange's risk controls to factors beyond price and are most commonly designed to address risks associated with a high frequency of trades in a short period of time. Activity-Based Protections may address the maximum number of contracts that may be entered as one order, the maximum number of contacts that may be

See http://www.reuters.com/article/2012/10/17/us-knightcapital-results-idUSBRE89G0HI20121017.

entered or executed by one firm over a certain period of time, and the maximum number of messages that may be entered over a certain period of time. Certified Options Exchanges' Activity-Based Protections would include:

- (i) Application to all traded products available on the Options Exchange;
- (ii) Mandatory use of available Activity-Based Protections by its members where the use of such protections is consistent with sound risk management practice; and
- (iii) Maximum number of contracts or orders that can be executed over a certain period of time.

Trades executed on Options Exchanges without Activity-Based Protections have a greater likelihood of erroneous trades occurring by not imposing limits based on factors other than price. Trading errors that result in a large number of orders or quotes could magnify the trading losses that result from the error and could cause the default of an OCC Clearing Member if the Clearing Member cannot meet its obligations due to such losses. For example, Activity-Based Protections could have limited the loss associated with the 2013 Trading Firm Error mentioned above.

iv. Kill-Switch Protections

Kill-Switch Protections provide Options Exchanges, and their market participants, with the ability to cancel existing orders and quotes and/or block new orders and quotes on an exchange-wide or more tailored basis (e.g., symbol specific, by member, etc.) with a single message to the Options Exchange after established trigger events are detected. A trigger event may include a situation where a market participant is disconnected from an Options Exchange due to an abnormally large inputted order or manual errors in the system by a market participant causing multiple erroneous trades to occur. Kill-Switch Protections are considered a last line of

defense, applicable where, for example, a severe trading problem occurs or an Options Exchange market participant loses connectivity to the Options Exchange. Certified Options Exchanges' Kill-Switch Protections would include:

- (i) The availability, and required use in the case of Options Exchange market makers, of "heartbeat monitoring," a function that periodically sends an electronic signal between the Options Exchange and the market participant that subsequently cancels all quotes and/or orders if the market participant does not respond to the signal in a certain period of time;
- (ii) Provide participants on the Options Exchange the ability to "cancel-on-disconnect;"
- (iii) The ability to cancel all quotes and/or orders with a single message to the Options Exchange, with the availability of backup alternative messaging systems; and
- (iv) Restricted automated reentry to trading after the activation of a kill-switch.

Trades executed on Options Exchanges without Kill-Switch Protections increase the risk that trading malfunctions or other harmful events could lead to erroneous trades executed on an Options Exchange and sent to OCC for clearance and settlement. If the Clearing Member that provides clearance for these trades was not able to absorb losses associated with them, it could potentially expose OCC and its surviving Clearing Members to significant losses and a disruption of operations. For example, the potential severity of the 2012 Trading Error could have been substantially limited if a Kill-Switch Protection temporarily restricted the trading firm's ability to trade.

Certification Process¹³

OCC has developed, in conjunction with the Options Exchanges, the following process to evaluate each Options Exchange's risk controls. Under the proposal, each Options Exchange would certify to OCC that the Options Exchange implemented the Risk Control Standards using a form provided by OCC and signed by an executive officer of the Options Exchange. ¹⁴ OCC proposes to accept and review such certifications on an annual basis, with initial certifications being accepted by OCC beginning on the date OCC receives all regulatory approvals associated with this proposal. Options Exchanges that submit documentation before March 31, 2016 (providing regulatory approval is received prior to that date) would receive a determination from OCC regarding their Standards on June 30, 2016 ("Evaluation Completion Date"). ¹⁵

OCC would evaluate, based on a review of such certification and supporting materials which will include, but will not be limited to, proposed rule changes filed with the Commission,

OCC intends to begin the collection and review of certification documents from the Options Exchanges after appropriate regulatory approval has been obtained. As such, OCC has not yet made any determinations regarding the compliance of any on Options Exchange with the proposed Standards.

The signed certification signed by an executive officer of the Options Exchange will attest to the validity, efficacy and implementation of each of the above described Standards. As part of the certification, the executive officer of the Options Exchange will certify that the Options Exchange has met the Standards as described in this proposed rule change as approved by the Commission.

If an Options Exchange intends to obtain regulatory approval prior to implementing a risk control, OCC shall consider the risk control as part of the Options Exchange if the Options Exchange makes the required regulatory filing on or prior to June 30 of the calendar year in which a determination is being made. If such regulatory filing is subsequently (i) withdrawn by the Options Exchange without a separate rule proposal to implement such risk control being filed within a reasonable amount of time thereafter or (ii) disapproved by the SEC, OCC would no longer-consider the proposal to be part of the Options Exchanges' risk controls. Beginning in 2017, annual certifications would be due on March 31 and compliance determinations would be made on or prior to June 30.

approved Options Exchange rules, information circulars, and/or written procedures, if any, an Options Exchange's Risk Control Standards by the Evaluation Completion Date, in each case consistent with the date of receipt of the certification. If OCC is unable to determine that an Options Exchange has sufficient Risk Control Standards, OCC would furnish the Options Exchange with a concise written statement of the reason(s) as soon as reasonably practicable. The Options Exchange may, within 30 days of receipt of the written statement providing the reason OCC was unable to find the Options Exchange maintained sufficient Risk Control Standards, present evidence of sufficient Risk Control Standards to OCC, and OCC would conduct a second review and make a recommendation to OCC's Risk Committee whether the Options Exchange has sufficient Risk Control Standards within 30 days of receiving the evidence of such Standards from the Options Exchange. OCC's Risk Committee would, within 30 days of receipt of the recommendation, review the recommendation and the Options Exchange's supporting materials, as appropriate, to determine whether the Options Exchange has

Because the proposed Standards are principle based, each Options Exchange will certify its compliance with the Standards within the proposed principles based upon a totality of the documentation submitted by the Options Exchange. Based upon the descriptions of the Options Exchange's controls in the certification and supporting materials, OCC staff will determine compliance with the Standards. OCC staff will look at factors including, but not necessarily limited to, the scope of the controls (i.e. if the controls apply to orders, quotes, etc.), the hours in which the controls will be implemented on the Options Exchange, the parameters around each control, and circumstances in which the controls will be triggered and market participants may be disconnected from an Options Exchange.

The initial compliance decision will be determined by OCC's Risk staff.

OCC's Risk Committee is chaired by a public Director and it does not currently have an Options Exchange representative. In the event OCC's Risk Committee has an exchange representative at some time in the future, such representative would be recused from a decision on the appeal of a determination of an Options Exchange's compliance with the Standards.

sufficient Risk Control Standards ("Risk Committee Review"). OCC would furnish the Options Exchange with a concise written statement of the Risk Committee determination and the reason for such determination as soon as reasonably practicable following the Risk Committee Review.

Beginning June 30, 2016 (providing regulatory approval is received prior to that date), OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising Clearing Members, with respect to each Options Exchange, whether: 1) OCC has determined the Options Exchange has sufficient Risk Control Standards; 2) OCC was unable to determine the Options Exchange has sufficient Risk Control Standards; or 3) a certification has not been submitted by the Options Exchange.¹⁹

Effect of Non-Compliance

As stated above, on June 30 of each year, beginning with June 30, 2016, OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising Clearing Members if OCC was unable to determine that an Options Exchange has sufficient Risk Control Standards (either because an Options Exchange submitted a certification but OCC was not able to determine the Options Exchange has sufficient Risk Control Standards or because an Options Exchange did not submit a certification). Beginning on the date 60 days after posting such notice, OCC would charge and collect the Fee for trades executed on an

For annual certifications commencing in 2017 and thereafter, beginning June 30 of the calendar year for which the certification is being made, OCC would post a notice to its website to which Clearing Members (but not the general public) have access advising members, with respect to each Options Exchange, whether: (i) OCC has determined the Options Exchange has sufficient Risk Control Standards; (ii) OCC was unable to determine the Options Exchange has sufficient Risk Control Standards; or (iii) a certification has not been submitted by the Options Exchange. In addition, OCC will continue to keep a record posted of the history of each Options Exchange's compliance status, and any changes made to that status, with the Risk Control Standards on the same OCC website to which Clearing Members (but not the general public) have access in order for Clearing Members to properly keep internal records.

Options Exchange for which OCC was unable to determine such Options Exchange has sufficient Risk Control Standards.²⁰ In the event the Fee is charged, it would continue to be charged to and collected from Clearing Members, and the notice that OCC was unable to determine that an Options Exchange has sufficient Risk Control Standards would remain posted on OCC's website to which Clearing Members (but not the general public) have access, until the Options Exchange has furnished evidence satisfactory to OCC's Risk Committee that the Options Exchange has sufficient Risk Control Standards. OCC believes that implementing this Fee may incentivize Options Exchanges to maintain sufficient Risk Control Standards, thereby reducing further risk to OCC, as Clearing Members may determine not to transact business with Options Exchanges that are subject to the Fee. 21 However, the primary reason for the Fee is to provide funds for OCC to manage the elevated risk associated with clearing trades executed on Options Exchanges without sufficient Risk Control Standards. OCC believes the Fee is reasonable, as it represents less than half but more than a third of a premium over the base rate of five cents per contract, and as such will provide OCC with additional funds in the event of a Clearing Member default resulting from a transaction executed on an Options Exchange that does not have sufficient Risk Control Standards, but, since clearing fees represent two percent or less of the total execution cost, should not materially alter a Clearing Member's determination to execute a transaction on an Options Exchange that does not have sufficient Risk Control Standards.

Attached as Exhibit 5 is an updated Schedule of Fees reflecting the Fee. As proposed, the Fee will be applied to all trades executed on a non-compliant Options Exchange. In other words, no more, or less, than a two cents Fee will be applied to trades executed on an Options Exchanges deemed to not be compliant.

OCC notes, however, that an Options Exchange that does not maintain Risk Control Standards is not prevented from submitting transactions to OCC.

Anticipated Risk Mitigation

OCC believes that applying the Risk Control Standards to the Options Exchanges that choose to submit a certification would mitigate potential risks to OCC and its Clearing Members. As part of this analysis, OCC reviewed past market disruptions including the 2013 Trading Firm Error and 2012 Trading Error described above and believes that the above described Risk Control Standards would have prevented or greatly reduced harm to OCC in those scenarios that were reviewed. OCC believes that market disruptions of this nature create a risk to OCC's Clearing Members and ultimately OCC's financial resources. As such, OCC believes that by introducing the proposed Standards, it can reduce the likelihood of financial harm to OCC and the market as a whole.

2. <u>Statutory Basis</u>

OCC believes that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Securities Exchange Act of 1934, as amended (the "Act"),²² as it would help ensure the safeguarding of securities and funds which are in the custody and control of OCC. Evaluating whether the Options Exchanges demonstrate sufficient risk controls and imposing a two cent fee on trades executed on an Options Exchange that does not would reduce the likelihood an erroneous trade: (i) is guaranteed by OCC, (ii) causes an OCC Clearing Member to default, and (iii) stresses the financial resources of OCC available for use in the event of a Clearing Member default, which financial resources include mutualized resources deposited by non-defaulting Clearing Members with OCC as Clearing Fund.

²² 15 U.S.C. 78q-1(b)(3)(F).

For similar reasons, OCC believes the proposed increase to fees for transactions executed on an Options Exchange for which OCC was unable to determine such Options Exchange has sufficient Risk Control Standards is an equitable allocation of reasonable fees among its participants, as required by Section 17A(b)(3)(D) of the Act.²³ The proposed additional Fee would be charged to Clearing Members that execute trades on Options Exchanges that were not deemed compliant with the Standards. These transactions executed on these Options Exchanges generate risk for OCC by increasing the likelihood that a guaranteed erroneous trade stresses OCC's financial resources available in the event of a Clearing Member default and that OCC would use mutualized resources deposited by non-defaulting Clearing Members to cover at least part of the loss. The two cent charge will better enable OCC to allocate fees to transactions that are driving that risk.

Finally, OCC believes the proposed rule change is consistent with Rule 17Ad-22(b)(4)²⁴ because it would help ensure that OCC guards against risk associated with clearing erroneous trades entered on an Options Exchange by requiring Risk Control Standards that are designed to prevent such erroneous trades from being submitted to OCC for clearing. As noted above, erroneous trades lead to an elevated risk of disruption to OCC and the financial markets it serves. OCC also notes that the proposed rule change is not inconsistent with any existing OCC By-Laws or Rules, including those proposed to be amended.

(B) Clearing Agency's Statement on Burden on Competition

²³ 15 U.S.C. 78q-1(b)(3)(D).

²⁴ 12 CFR 240.17Ad-22(b)(4)

The proposed rule change may impose a burden on competition by virtue of the potential imposition of the two cent fee on Options Exchanges that do not demonstrate sufficient Risk Control Standards.²⁵ OCC believes this potential burden on competition is necessary in furtherance of the Act, as it is vitally important that a systemically important financial market utility like OCC has adequate means by which to protect itself against the heightened risk it carries by providing clearing services for Options Exchanges that do not demonstrate sufficient Risk Control Standards in order to protect the financial markets that OCC serves. The proposed rule change protects investors by reducing the risk to OCC's financial resources, which furthers the intent of the Act.

(C) <u>Clearing Agency's Statement on Comments on the Proposed Rule Change</u> <u>Received from Members, Participants or Others</u>

Written comments on the proposed rule change were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

III. <u>Date of Effectiveness of the Proposed Rule Change and Timing</u> for Commission Action

Within 45 days of the date of publication of this notice in the <u>Federal Register</u> or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- (A) by order approve or disapprove the proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

²⁵ 15 U.S.C. 78q-1(b)(3)(I).

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act.

Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commissions Internet comment form (http://www.sec.gov/rules/sro.shtml); or
- Send an e-mail to <u>rule-comments@sec.gov</u>. Please include File Number SR-OCC-2015-019 on the subject line.

Paper Comments:

 Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-OCC-2015-019. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Section, 100 F Street, N.E., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of OCC and on OCC's website at

http://www.theocc.com/components/docs/legal/rules_and_bylaws/sr_occ_15_019.pdf

All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-OCC-2015-019 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission by the Division of Trading and Markets, pursuant to delegated Authority. ²⁶

Kevin M. O'Neill Deputy Secretary

Action as set forth recommended herein APPROVED pursuant to authority delegated by the Commission under Public Law 87-592. For: Division of Trading and Markets

Ву:		
Print Name:	12	
Date		

Form of Certification

[Date]

The Options Clearing Corporation
One North Wacker Drive, Suite 500
Chicago, IL 60606
Attn: []

Re: Certification Relating to Exchange Risk Controls Standards

Dear []:

[Insert Exchange Name] ("Exchange"), a participant exchange of The Options Clearing Corporation ("OCC"), hereby certifies to OCC that it has established and implemented risk controls that meet OCC's approved exchange risk controls standards ("Standards") as specified below:

i. Price reasonability checks:

- o These checks are mandatory, not optional. See: [identify rule or other means that describes the checks and indicates that they are mandatory]
- o These checks apply to quotes. See: [identify rule or other means by which the checks apply to quotes]
- o These checks apply to limit orders. See: [identify rule or other means by which the checks apply to limit orders]
- o These checks apply to complex orders. See: [identify rule or other means by which the checks apply to complex orders]
- o These checks apply to all trading sessions (although not necessarily in a uniform manner), including market openings. See: [identify rule or other means by which the checks apply to all trading sessions, including market openings]
- o If these checks do not prevent the display and execution of quotes, the Exchange has other means by which it mitigates the risks associated with the display and execution of quotes outside the specified threshold. See: [identify rule or other means by which the risks are mitigated]

ii. Drill-through protections:

- o These protections are mandatory, not optional, and include reasonably quantifiable limits. See: [identify rule or other means that describes the protections (including the reasonably quantifiable limits) and indicates that they are mandatory]
- O These protections cover all orders, including market, limit and complex orders. See: [identify rule or other means by which the protections cover all orders, including market, limit and complex orders]
- o These protections apply to all trading sessions (although not necessarily in a uniform manner), including market openings. See: [identify rule or other means by which the protections apply to all trading sessions, including market openings]

iii. Activity-based protections:

- o These protections apply to and across all traded products. See: [identify rule or other means that describes the protections and indicates that they apply to and across all traded products]
- O Use of these protections is mandatory where such use is consistent with sound risk management practice. See: [identify rule or other means that indicates whether available activity-based protections are mandatory]
- o These protections include a maximum number of contracts and/or orders that can be entered and/or executed over a set period of time. See: [identify rule or other means by which the protections limit the number of contracts and/or orders that can be entered and/or executed over a set period of time]

iv. Kill-switch protections:

- O These protections provide participants on the Exchange the ability to "cancel-on-disconnect" (i.e., cancel all orders or quotes in the event the participant disconnects from the Exchange). See: [identify rule or other means that describes the protections and indicates that they are available to market participants]
- These protections include "heartbeat monitors" that periodically send a signal to each participant anticipating a response, which allow the Exchange to cancel all quotes or orders for any participant that does not respond, and are mandatory in the case of market makers. See: [identify rule or other means that describes the protections, indicates that they are available to market participants, and indicates that they are mandatory in the case of market makers]
- These protections include the ability for a participant on the Exchange to cancel all quotes and/or orders with a single message to the Exchange, with availability of backup alternative messaging systems. See: [identify rule or other means that describes this aspect of these protections]
- These protections restrict automated re-entry to trading after the activation of a kill-switch protection in order to prevent repeated triggering of the kill-switch.

See: [identify rule or other means by which the protections restrict automated reentry to trading after the activation of a kill-switch protection]

Please contact [OCC contact information] with any question you may have regarding this certification.

Sincerely,

[Exchange]

By: [Name] Its: [Title*]

*Note: Certification must be executed by an executive officer of the exchange.

EXHIBIT 5

THE OPTIONS CLEARING CORPORATION SCHEDULE OF FEES – SEPTEMBER 201[5]6

CLEARING MEMBER

CLEARING

Clearing Fees**

Trades with contracts of:

1 - 500 \$.05 501 - 1000 \$.04

1001 - 2000 \$.03

Greater than 2000 \$ 55.00/trade

New Products

Unless otherwise agreed to by OCC and the applicable exchange, from the first day of listing through the end of the following calendar month \$0.00

Market Maker/Specialist Scratch and Linkage Fees per side*

\$ 0.02

Exercise Fee - per line item

on exercise notice

\$ 1.00

MEMBERSHIP

New Clearing Member

Qualification Fee

\$4,000.00

Stock and Market Loan Program Transaction Fees

Per transaction assessed against each

lender and borrower

\$ 1.00

STAMPS

Clearing Member Authorization Stamp

\$ 23.00 per stamp

Minimum Monthly Clearing Fee

\$ 200.00

- *A Market Maker/Specialist or Linkage transaction that includes more than 2,750 contracts will be charged a flat fee of \$55.00 per trade per side.
- ** Any trade executed on an options exchange for which OCC is unable to determine compliance with OCC's Exchange Risk Control Standards is subject to an additional fee of \$0.02 per contract beginning September 1, 2016.

ANCILLARY SERVICES

TIER I

- ENCORE Access
- MyOCC Access
- Data Service proprietary position and trade data (includes transmission to service bureau
- Report Bundle
- Series File
- Special Settlement File
- Open Interest File
- Prices File
- Stock Loan File
- Theoretical Profit and Loss Values
- Leased line charges are additional

\$ 1,500.00 per month

Additional Clearing Member:

No Charge

TIER II

- ENCORE Access
- MyOCC Access
- Data Service proprietary position and trade data (includes transmission to service bureau)
- Report Bundle
 - Leased line charges are additional
 - \$ 1,000.00 per month

TIER III

- ENCORE Access
- MyOCC Access

\$650.00 per month

TIER IV (Stock Loan Only)

- ENCORE Access
- MyOCC Access

\$ 300.00 per month

LEASED LINE SERVICES

T1 line to a Midwest Destination

\$1,000.00 per month, per line

T1 line to an East Coast Destination

\$1,500.00 per month, per line

T1 line to a West Coast Destination

\$2,000.00 per month, per line

CLEARING MEMBER/NON-CLEARING MEMBER

PUBLICATIONS/BROCHURES

Disclosure Documents

\$.45

OCC/ICC By-Laws and Rules

\$ 47.00

(Updates can be obtained on a subscription basis for \$47.00 per year.)

NON-CLEARING MEMBER

SERIES INFORMATION

Non-Clearing Member

Non-Distribution

\$1,750.00 per month

Distribution

\$3,000.00 per month

Real Time Data

\$250.00 per month

(in addition to fees listed above)

PRICES INFORMATION

Non-Clearing Member

\$3,000.00 per month

THEORETICAL PROFIT AND LOSS VALUES*

Non-Clearing Member

\$1,000.00 per month

ESCROW BANKS

ESCROW PROGRAM FEES

Escrow Bank Monthly Program Fee

\$200.00

ALL FEES ARE SUBJECT TO CHANGE

For further information, contact Member Services at 1-800-621-6072.